AIDAP Users Transition (NOTAMs)

By: The FNS Team

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Briefing Topics

- Transition Overview
 - Including Schedule
- NOTAM System Interfaces
 - USNS / AIDAP
 - FNS / SWIM
- AIDAP Replacement Services
- User Next Steps
 - Review Documentation
 - Perform SWIM / SCDS Access Steps
 - Develop & Test User's Client Software
- FAA Next Steps
- Questions / Concerns



Transition Overview

Why transition at all?

- The FAA Reauthorization Act of 2018 requires the FAA to provide a single, publicly accessible, machine readable interface to receive NOTAMs
- The legacy NOTAM system USNS, which powers AIDAP, will be eventually retired

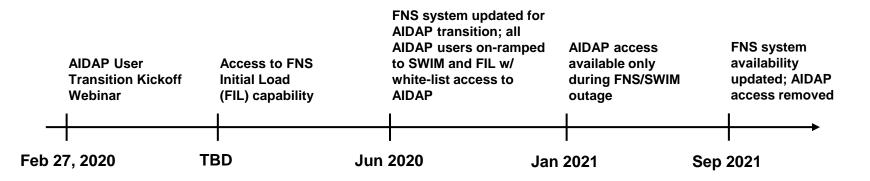
Who is transitioning?

 All Aeronautical Integrated Data Access Portal (AIDAP) users, who are not already SWIM FNS consumers

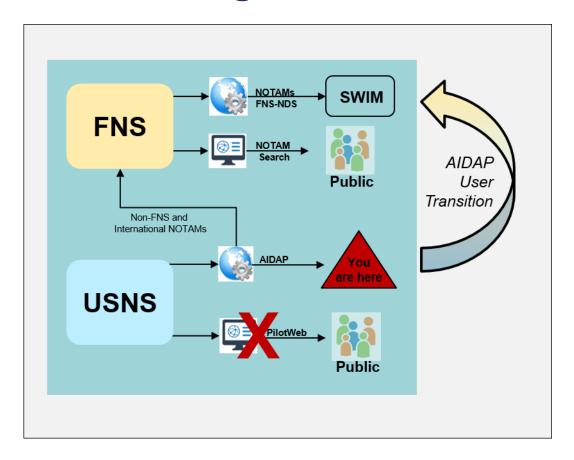
Where do AIDAP users go?

- Each AIDAP user will be transitioned to both:
 - SWIM Cloud Distribution Services (SCDS) a SWIM NOTAM feed, and
 - A new FNS capability that provides an active NOTAM baseline or FNS Initial Load (FIL)

When will transition occur?

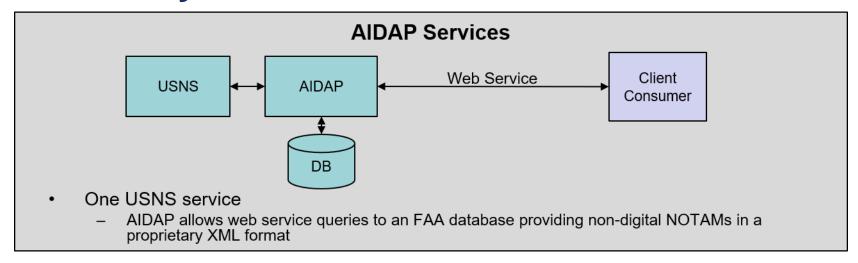


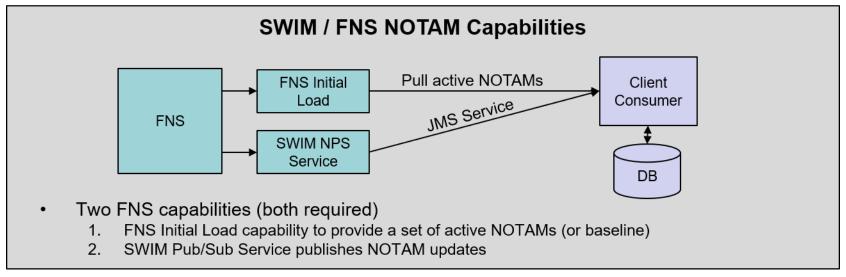
Part of a Larger Vision



- Consolidate NOTAM capability to a single authoritative source
 - FNS
- Leverage enterprise distribution mechanisms
 - SWIM
- Move towards full ICAO compliance
 - Initially ICAO formatting, numbering
- Continue conversion to digital NOTAMs
 - Graphical TFR NOTAMs
- Sunset Legacy Services / Systems
 - AIDAP
 - USNS

NOTAM System Interfaces

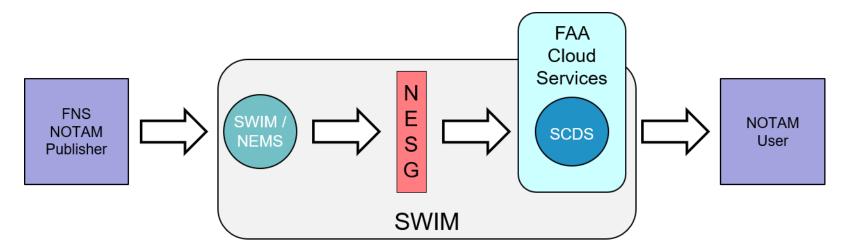




SWIM / FNS NOTAM Capabilities

Two Capabilities	Purpose	Service Protocol	Output	Status/Plan
SWIM Cloud Distribution Service (SCDS)	Publishes NOTAM changes in real-time	JMS Pub/Sub	AIXM 5.1 format	Available Today
FNS Initial Load (FIL)	Provides Initial set of Active NOTAMs	Secure FTP	AIXM 5.1 format	To be available prior to Summer 2020

SWIM Cloud Distribution Service (SCDS)



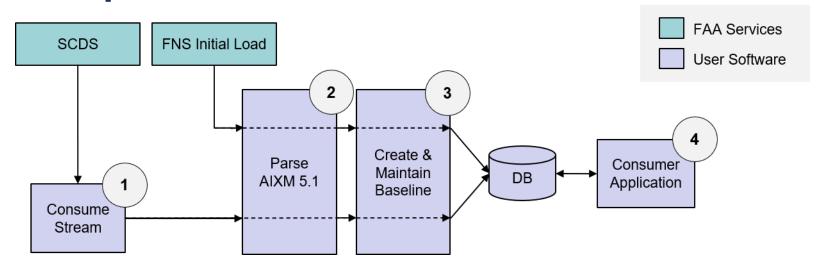
- SCDS provides access to FNS JMS Pub/Sub service
 - Contains NOTAM updates delivered in real time as JMS messages
 - Using SWIM's NAS Enterprise Messaging Service (NEMS) and NAS Enterprise Security Gateway (NESG)
- Subscribing to NOTAMs through SCDS can be completed very quickly

FNS Initial Load (FIL) Overview

- The FNS Initial Load capability allows users to create a baseline of all active NOTAMs in the NAS
- Users can access FIL data at any time
- FIL data contains a baseline of active NOTAMs to:
 - Initialize a database with a set of active NOTAMs or
 - Validate the integrity of a database of active NOTAMs
- FNS Initial Load (FIL) data will be accessed through Secure FTP using simple authentication
- FIL data:
 - Will include all NOTAM types: Domestic, FDC, Military, International, Local Military
 - Will not contain canceled or expired NOTAMs
 - Will be updated periodically



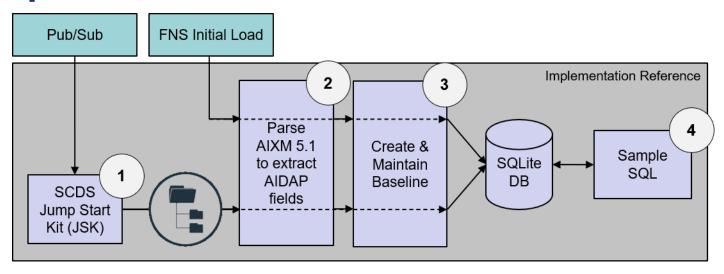
Anticipated Use Case



Steps:

- User sets up SWIM Cloud Distribution Service and starts consuming NOTAM changes messages
- Software retrieves current set of active NOTAMs
- 3. Software initializes local database using FNS IL to make a baseline of active NOTAMs and maintains baseline with changes coming from NOTAM Stream
- 4. Software queries local database

Implementation Reference



Implementation Reference Contents:

- 1. Jump Start Kit (JSK) provided by SCDS, including JSK configuration instructions for writing AIXM 5.1 files to a filesystem
- 2. Ruby application that parses AIXM 5.1 extracting fields needed for AIDAP
- 3. Processes output from FIL to create a NOTAM baseline, and processes NOTAM message files from filesystem to maintain baseline
- SQLite database that persists a set of active NOTAMs and example SQL queries to retrieve NOTAMs

User Next Steps

Request Access to SCDS

- Visit: https://www.faa.gov/air_traffic/technology/swim/products/get_connected/ and follow the 4-step process to get access to SCDS
 - When you visit: https://data.faa.gov/data/ for your data access agreement, select "Notice to Airmen (NOTAM) Java Service"

Access to SCDS data

- Visit: https://scds.swim.faa.gov/
- Select "Get Started"
- Register
- Select "AIM FNS" (this is the NOTAM Java Service)
- For all multi drop down boxes select "All"
- Wait for request to be approved
- Download appropriate consumer jumpstart kit (or use your own JMS consumer client)
- Connect to your data feed

FAA Next Steps

The FAA is planning to provide:

AIDAP User Transition Packet 1 (March 5, 2020)

- 1. AIXM 5.1 to AIDAP mapping documentation
- 2. Instructions to configure SCDS Jump Start Kit to put files on file system
- 3. Sample Initial Load file(s)
- 4. Sample SCDS NOTAM message files

AIDAP User Transition Packet 2 (Mid/Late March 2020)

- 1. More information on FNS Initial Load interface
- 2. A reference Ruby application that parses AIXM NOTAMs to create and maintain a baseline database
- 3. Sample SQL that queries the baseline similar to AIDAP

Contact Information

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Questions / Feedback